CITY OF FAYETTEVILLE ARKANSAS

MEETING AGENDA

Water, Sewer, and Solid Waste Committee

27 June 2023

5:30 P.M.

(Or immediately following City Council Agenda Session)

Committee: Council Member Teresa Turk, Council Member D'Andre Jones, Council Member Mike Wiederkehr, Council Member Scott Berna

Copy to: Mayor Lioneld Jordan, Paul Becker, Susan Norton, Kara Paxton, Kit Williams, Chris Brown, Alan Pugh, Terry Gulley, Ross Jackson, Peter Nierengarten, Brian Pugh, Corey Granderson, Aaron Watkins, Cody Ashworth, Greg Weeks, Jan Guy, Mayo Miller, Josh Alleman

From: Tim Nyander, Utilities Director

CALL TO ORDER

UPDATES

OLD BUSINESS:

1. Rate Study Update

NEW BUSINESS:

2. City of Greenland Sewer Cost Share

The City of Greenland owns its sewer collection system, including a lift station and force main within their corporate city limits. Due to past and anticipated growth, upsizing of these facilities is necessary, all at Greenland's cost. This system connects to the City of Fayetteville's sewer system just north of Drake Field at which point it is conveyed through gravity sewers, lift stations, and force mains on its way to the Noland Water Resource Recovery Facility.

In anticipation of these upgrades, the City of Fayetteville also needs to upsize facilities to accommodate this additional flow. These upgrades include approximately 1,860-feet of gravity sewer upsizing from 12" to 18" diameter leading to sewer Lift Station #16 on Ernest Lancaster Road. This lift station is also being modified to accommodate an additional pump. The downstream sewer force main is already adequate for these increased flows.

The City of Fayetteville and City of Greenland have cooperated to incorporate Fayetteville's scope of improvements into the project bid package for the Greenland project. This is an advantage to Fayetteville in that economies of scale should keep costs competitive. It also reduces the project management burden on City of Fayetteville staff.

This cost share agreement consists of Fayetteville paying 100% of costs for upsizing Fayetteville infrastructure and likewise Greenland paying 100% of costs for Greenland's infrastructure. Competitive bids were received by Greenland on June 6th, 2023 and the low bid cost of the Fayetteville scope of work was $954,000.00.

Staff recommends the approval of a cost share agreement with the City of Greenland in an amount not to exceed $954,000.00 for upsizing a portion of 12-inch sanitary sewer line to 18-inch, and to approve a project contingency in the amount of $100,000.00.

STAFF REQUESTS THIS BE FORWARDED TO THE CITY COUNCIL FOR CONSIDERATION FOR APPROVAL

3. Forensic Water Audit
The City conducted an AWWA-M36 Water Audit in 2018 through consulting engineer Black & Veatch. One of the recommendations from this audit was to perform further analysis of data handling and billing. Specifically, a forensic analysis of billing system data involving a complete download of our database looking for anomalies, trends, or errors.

This type of water loss is classified as "apparent loss" since it is not related to physical water being leaked. E Source Companies, LLC specializes in assisting water utilities track down apparent water losses. These errors may be associated with a variety of processes that support the billing system and the billing process. Further investigation will also be performed focusing on identifying Customer Metering Inaccuracies, Unauthorized Consumption, and source meter accuracy from Beaver Water District. The City has exhausted in-house abilities to assess these matters and looks forward to working with E Source to take a deeper look into water losses. E Source has helped several other local Arkansas utilities with similar needs, generating good reviews of their service.

E Source was selected for these services through the City's engineering selection committee process on March 30, 2023 (RFQ 23-01, Selection #4). Staff recommends approval of an engineering services agreement with E Source Companies, LLC for Water Loss Investigation Services in an amount not to exceed $95,000.00 plus contingency.

STAFF REQUESTS THIS BE FORWARDED TO THE CITY COUNCIL FOR CONSIDERATION FOR APPROVAL

11. Overview of WWTP Monthly Report
April 2023 Monthly WWTP Report

PRESENTATIONS

ATTACHMENTS

ADJOURN
Next Water, Sewer, Solid Waste Committee meets on
Tuesday, July 11, 2023, at 5:30 p.m.

City of Fayetteville

Monthly Report for April 2023

Prepared by:

Jacobs

May 20, 2023

CITY OF FAYETTEVILLE ARKANSAS

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1. Executive Summary

1.1 Fayetteville Team

During the month, the Fayetteville team consists of 49 staff members, and we added two summer utility workers. Of the 51 staff members, 95.3% of the total labor hours are dedicated to the Fayetteville Projects and 4.7% is utilized at other Jacob Projects. During the month, there were two open positions. The Regional Support team was utilized to assist with the work order backlog, capital improvement projects, and various special projects. The Employee Vacancy and Project Status Report is presented in Attachment C.

A. Team Award

On April 22, during the Earth Day Event, the Mayor presented us with the 2023 Mayor's Environmental Stewardship Award, winner in the Business category.

Jeff Hickle, Environmental Specialist, accepted the award on behalf of the team.

1.2 Special Projects

1.2.1 Dryer Installation Project

The onsite team continued to conduct internal bi-weekly meetings during April to document and provide the City with project status updates. To assist with project coordination, the onsite team participated in weekly meetings with the City and the Dryer Vendor.

The Dryer Installation Project was scheduled to conclude on April 20 but was postponed due to delivery of specialized CPVC fittings and hydraulic hoses/fittings. The maintenance commissioning has been rescheduled for May 22, 2023. The labor hours dedicated to the dryer operations were used for the installation project along with assistance from our SCADA and Electrical Technicians and Regional Support Technicians. The labor utilized on the Dryer Project increased during April, a total of 996 labor hours was documented to the dryer installation project. Additional details for the dryer installation project are provided in Section 4.4 of this report.

1.2.2 Noland Master Plan

Garver Engineering was awarded the contract to develop the Noland Wastewater Master Plan. The staff continues to assist Garver with the development of the Master Plan.

On April 25, the staff received the Noland Condition Assessment which was developed by developed by Garver following the February site visit along with several staff discussions. Garver has scheduled a May 10 Workshop to review the Condition Assessment with the City and some of our team.

1.3 Compliance

1.3.1 Noland

The Noland facility met all discharge permit parameter limits throughout April.

1.3.2 West Side

The West Side facility met all discharge permit parameter limits throughout April. There was a Lift Station Sanitary Sewer Overflow (SSO) reported:

> On April 24, a manhole overflowed near Lift Station 19, Mally Wagnon. The overflow was not weather related, and the staff determined that grease and rags had interfered with the station's automated pump controls and wet-well monitoring equipment. The staff was able to clear the rags in the wet-well float area and return the station to operational status. Staff were able to notify the City and obtain vac-truck services to remove the grease and rage accumulation. The overflow was estimated at 54,000 gallons, which was maintained around the grounds of the manhole. There were no adverse environmental impacts observed and none are expected.

1.4 Financials

The month ended with a positive year to date financial variance. The non-labor expenses were under budget which reflects a timing issue with some of the projected projects. The labor expenses were slightly over budget which reflects additional labor required for the special projects.

The April (year-to-date) projected budget is favorable by $52,750.

Table 1.1: Year to Date Budget

Budget Performance

Month	Labor Dollars	Non-Labor Dollars	Year-to-Date Dollars
Jan 2023	-$6,114	$1,915	-$4,199
Feb 2023	-$18,218	-$5,822	-$24,040
Mar 2023	$3,501	-$88,298	-$84,797
Apr 2023	$18,185	-$70,935	-$52,750
May 2023			
Jun 2023			
Jul 2023			
Aug 2023			
Sep 2023			
Oct 2023			
Nov 2023			
Dec 2023			
Minimum	-$18,218	-$88,298	-$84,797
Maximum	$18,185	$1,915	-$4,199

2. Plant Operations

The effluent quality and influent loadings data is presented in Appendices A and B. The Summary tables for Noland and West Side Wastewater Treatment, effluent permit parameter limitations, were updated to reflect the more restrictive April through May effluent discharge limitations.

The staff recorded a total of 1.5 inches of rain this month and the average temperature was 58 degrees.

Note: temperature obtained from https://www.timeanddate.com/weather/usa/fayetteville-ar/historic?month=4&year=2023

2.1 Process Control

2.1.1 Noland

During the month, the influent loading was consistent with the previous month as the aeration basin water temperature continued to rise which coincides with the warmer Spring weather conditions. Microbial activity doubles when the temperature increases by 18 degrees Fahrenheit which reflects in an increase to the biodegradation of constituents. The Mixed Liquor Suspended Solids (MLSS) is utilized as an indicator of the amount of biomass in the basins. During the warmer seasons, less biomass is required to maintain the treatment process. This month the staff decreased the MLSS target to 2500 mg/L.

The facility treated 140.3 million gallons (MG) of influent water with an average daily flow rate of 4.68 million gallons/day (mgd). The peak flow was recorded on April 27, at 6.63 mgd.

The staff worked with Badger, Vac Truck Service vendor, to clean out the offline grit basin. The maintenance and SCADA team worked throughout the month to return the grit system to normal operational status.

The Ozone Chiller #2 failed with a fault indicating a temperature probe. The staff investigated and discovered something had chewed through the wires. The staff replaced the probes and installed a fence protection made of metal mesh to prevent wildlife from entering the system.

2.1.2 West Side

The facility treated 262.1million gallons (MG) of influent water. The peak flow was recorded on April 1, at 11.1 mgd. The average daily flow rate was 7.1 mgd.

The staff noticed and replaced faulty Dissolved Oxygen (DO) probes in the West Aeration Basin, Oxic Zones 7, 8, and 9.

3. Laboratory

The Fayetteville Laboratory provides sampling and analysis for process control and regulatory compliance for both the Noland and West Side WRRF's, and the Biosolids Management Site (BMS), in addition to the samples collected for monitoring the Industrial Pretreatment Program (IPP).

3.1 Bio Aquatic Analysis (WET and TRE)

The Final Toxicity Reduction Evaluation (TRE) Report was received from Jeremy Rigsby, FTN Associates. The TRE study was conducted on the Goose Creek outfall at the West Side WRRF after toxicity to the fathead minnow, *Pimephales promelas*, was detected in samples collected in the last quarter of 2020. The study was conducted over a 28-month period and did not identify samples with sufficient toxicity to *P. prom*elas to justify follow-up Toxicity Identification Evaluation (TIE) testing. The Final TRE report was sent to Mary Barnett, Ecologist Coordinator, ADEQ. The facility will continue regular WET testing as scheduled and work with DEQ to identify sources and prevent the recurrence of WET testing violations, should any toxicity return.

4. Biosolids Management Site

4.1 Biosolids Operations

During the month the Wastewater Reclamation Recovery Facility's (WRRF) produced 2,211 wet tons of belt-filter-pressed biosolids. Due to the reduction of solar house capacity, approximately 23 tons of biosolids were sent directly to the landfill. The remaining 2,188 wet tons of biosolids were applied into the solar houses and partially dried. There were approximately 1,526 tons of partially dried biosolids sent to the landfill. This computes to 662 tons of water removed from the material before disposal. By partially drying biosolids before hauling to the landfill, it is estimated that $31,902 was saved in tipping fees. The total cost of tipping fees for the month was approximately $73,538.

4.2 Water Treatment Residuals

During the month, the acceptance of Water Treatment Residuals (WTR) was impacted due to permit application regulations regarding the weather and field conditions. The site received 1,033 tons, or 58 dump truck loads, which generated about $22,637 in revenue.

4.3 Hay Harvest

On April 3, the staff conducted the Annual Hay Call-In Event. The event generated a total of 47 hay customers being added to the hay request list and a request for 7,215 tons of hay.

The staff identified a high concentration of Buttercup Flowers and Musk Thistle in the western portion of Area 3. To manage the undesirable forage, the staff performed a pesticide application of Pastora and 2 4-D. The application was performed on April 11th to utilize light wind, clear sky, and no temperature inversion in the forecasted weather conditions.

4.4 Dryer Installation Project

The Dryer Manufacture, Griffin Residuals, were onsite during the month and they commissioned the burner and blower systems. During the initial startup there was a minor power issue with the blower, but the staff were able to rectify the issue and the performance check was a successful event. Additionally, Griffin demonstrated the operation of the sludge dryer's sifter / pelletizer for our team and some of the City staff members.

Dryer Shifter Demonstration

The vendor, Hiwasse Plumbing and Excavation, provided the natural gas supply line installation along with relocating a gas meter for the new sludge dryer. After the installation, the vendor Multi-Craft Construction, provided an inspection of the plumbing, from the gas meter to the new sludge dryer's burner system. The inspection produced no issues, and no leaks were discovered.

4.5 Equipment Maintenance

The WTR Spreader Truck, Unit # 768, was returned to service this month. The truck is necessary during the Spring WTR application due to the forage damage that results when using the lower height trailer spreader. As the hay season commences, our dependency on Unit 768 will be reduced as the harvested hay zones will become the target areas for WTR application.

4.6 Revenue

There were no hay or fertilizer sold during the month. The staff accepted and applied 1,033 tons of WTR this month.

Table 4.1: Revenue generated from the BMS

Product	Tons Sold/Received	Revenue Generated
Hay	0	$0
Fertilizer	0	$0
Water Treatment Residuals	1,033	$33,395

5. Maintenance

5.1 West Side

For most of the month, the West Side maintenance team were utilized on the Dryer Installation Project along with the Noland Headworks Project. They were able to replace some of the light fixtures as part of the LED Light Fixture Project. This light replacement project has improved the visibility throughout the facility.

5.2 Noland

This month, the grating covering the twelve anoxic mixer chambers located on the Biological Units (Aeration Basins) was replaced.

The mixers were replaced with banana style mixers last month and it was discovered that the grating was no longer adequate to protect from items falling into the basin and was deemed unsafe for staff to walk upon.

The staff contacted a fabrication company to design a solid floor grating cover to fit each of the openings. The new covers provide fall protection, have an easy access, and they are easier to recognize when the doors are open.

The staff contacted Badger Vacuum Services to assist with cleaning both Headworks Grit Vortexes. When the vortexes were cleaned, the team was able to flush the grit lines and test the equipment. There were some pump issues and control problems, but the staff were able to complete the repairs and the system was returned to normal operational status.

5.3 Lift Stations

The staff continued to focus on the pump issues at Lift Station 5 this month. There are only two of the four pumps are in operation. The two failed pumps have been out for repair for several months. When there is limited pumping capacity, the station is prone to overflowing during high rain events. The staff utilized the vendor Jack Tyler Engineering and procured a rental pump specifically designed for this lift station.

During a recent storm event, the fence at Lift Station 46 sustained damage. The staff had previously noted the fence deterioration due to age and replacement fence material had been ordered before the damage occurred. This month the fence was removed and replaced with new steel posts, steel picket stringers, and new cedar pickets.

5.4 Key Performance Indicators/Measures

Figure 5-1: Labor Hours by Work Order Type

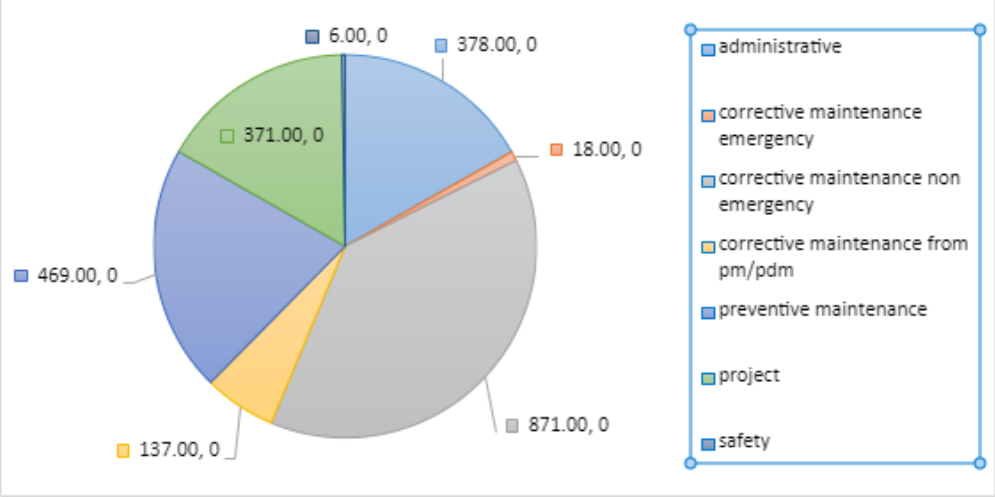
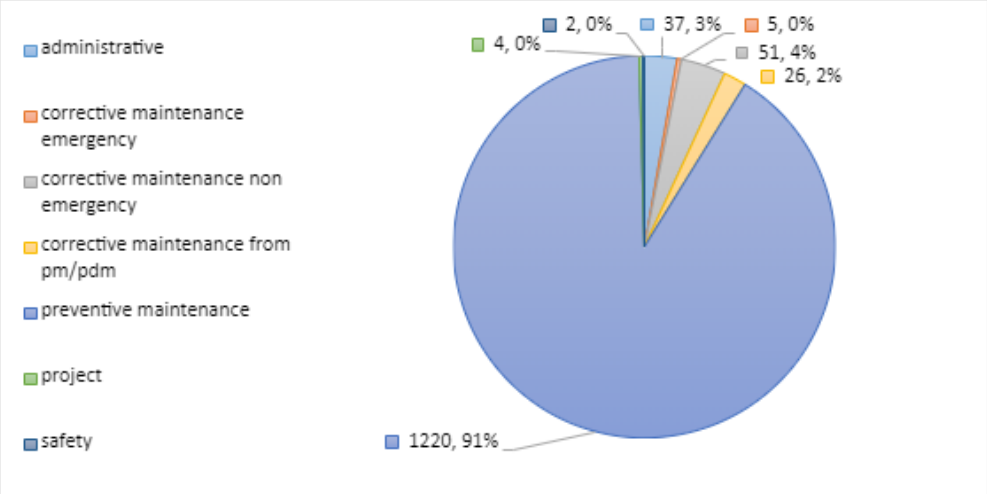


Figure 5-2: Work Order Count by Type



5.5 Capital Improvement Projects (CIP)

A purchase order was issued for the repair of the Gregg Avenue Lift Station Pump 2. The pump was sent to Electric Motor Center earlier in the year for a hidden damages' inspection.

The staff solicited quotes for the West Side Grit Scum Removal Unit (GSRU) 2 replacement parts. Currently only Multi-Craft Contractors has responded to the request.

Purchase orders were issued for the repairs of Aerator 2 and Aerator 3 at Noland. These units were sent to JCI Industries earlier in the year for repair estimates.

6. Industrial Pretreatment

There were two University of Arkansas laboratories that were inspected to determine the need for an industrial user permit which is based on Federal Categorical Standards. Both laboratories were determined to be non-manufacturers and merely provide research and education.

The 2022 Annual Industrial Pretreatment Inspection Reports were issued to all permitted industries, as required by state and federal regulations. The monthly surcharge and waste hauler reports were completed and sent to the city for billing. The IPP Revenue information is presented below.

Table 6.1: Industrial Pretreatment Program (IPP) Revenue Summary

REVENUE	
$77,576.83	Surcharges on March data
$2,550.00	Fees from hauled waste accepted in April
$0.00	Other fees paid in April
$0.00	Fines assessed in April
ZERO VIOLATIONS FOR ALL INDUSTRIAL USERS	Violations on March data

7. Woolsey Wet Prairie

April is the beginning of the herbicide treatments with the target on invasive species removal within and near Woolsey Wet Prairie. There, weather provided several ideal treatment days. The invasive species that were treated included: Yellow Rocket, Ox-eye Daisy, Curly Doc, Milk Thistle, Burdock, Poison Hemlock, Himalayan Blackberry, Rosa Multiflora, Winter Creeper, Callery Pear and Bush Honeysuckle.

Much of the success in diminishing, and oftentimes preventing, the establishment of highly invasive species within Woolsey Wet Prairie is employing similar vegetation management efforts within approximately 20-acres of city owned "buffer" spaces, or undeveloped spaces adjoining Woolsey Wet Prairie. Yellow Rocket, Ox-eye Daisy and Poison Hemlock are all great examples of species treated this month that, if left unaccounted, could quickly establish re-seeding populations having a significant negative impact on Woolsey's vegetation diversity and overall ecosystem services productivity.

8. Community Involvement

The staff participated in the Farmington Branch & Creekside Park 4th Annual Illinois River Clean up. In celebration of Earth Day, several staff joined 13 local volunteers partnering with the City of Fayetteville Parks and Recreation Department, Keep AR Beautiful, and the Illinois River Watershed Partnership (IRWP) to tackle cleaning at the Farmington Branch (a tributary of the Illinois River) near the Creekside Park.

Additional staff celebrated Earth Day by accepting the Mayor's Environmental Stewardship Award and then joined volunteers to clean litter along local roadways.

The event ended with staff contributing to the NW Arkansas Earth Day community celebration along with 18 other Watershed Protection/Conservation groups to educate and engage community participants on water quality and environmental stewardship efforts in the NWA area.

Greenland's Helping Individuals Reach Employment Dreams (H.I.R.E.D.) Program hosted the Annual Career Fair at Greenland and one of our staff members was able to participate and engage with the middle school and high school students about environmental services and facility O&M job opportunities while participating at the career fair.

9. Health & Safety

The safety team conducted all safety inspections throughout the month and various safety training was offered throughout the project. The Electronic formatting of the safety planning continues to be a success.

The Biosolids Management area implemented the electronic pre-task plan (e-PTP) within their department. The Maintenance and lab have utilized the electronic e-ptp's for a while along with Operations. The facility staff have been a main proponent for getting Fayetteville away from the use of paper. The safety planning tool has the potential to provide great savings for future paper waste.

The safety committee continues to look for ways to improve the existing safety within the project. The team continues to receive consistent feedback regarding safety and site compliance. The main benefit is the ability to have a representative from each of the departments. The committee has been able to deal with maintenance and resolve all past safety work orders.

Appendix A: Noland Effluent Report

White River Average Daily Effluent Report

Month	Flow MGD	CBOD mg/L	CBOD Load Lbs	TSS mg/L	TSS Load Lbs	Total P mg/L	Total P Load Lbs	NH3 mg/L	NH3 Load Lbs	D.O (min) mg/L	pH (min) SU	pH (max) SU	Fecal Coliform Geo Mean CFU/100 mL
Permit Limit Apr-May		*7.5*	*788*	*5.0*	*525*	*1.0*	*105.0*	*2.1*	*221*	*>7.7*	*>6.0*	*<9.0*	*200*
Apr 2023	6.275	3.5	186	<1.9	<103	<0.1	<7.4	0.08	4.2	14.2	7.4	7.6	37
Mar 2023	7.907	3.0	201	<1.5	<101	<0.1	<8.8	0.06	4.4	13.3	7.4	7.5	<37
Feb 2023	7.466	3.6	222	3.1	197	0.2	11.1	0.11	7.1	13.6	7.4	7.5	43
Jan 2023	6.447	3.8	205	2.6	140	0.1	8.0	0.09	5.0	14.3	7.4	7.6	26
Dec 2022	5.970	4.2	215	<2.7	<140	0.2	8.2	0.13	6.4	11.7	7.4	7.6	<22
Nov 2022	4.556	3.4	128	1.5	55	0.1	5.5	0.24	7.0	11.7	7.4	7.6	51
Oct 2022	4.277	4.1	141	<1.4	<50	<0.1	<4.2	0.09	2.9	15.5	7.4	7.6	41
Sep 2022	4.620	3.8	142	<1.7	<63	<0.3	<10.5	0.06	2.3	14.9	7.5	7.7	>66
Aug 2022	5.261	4.4	192	<1.6	<70	0.3	14.5	0.06	2.7	14.1	7.2	7.6	136
Jul 2022	5.166	2.9	160	<1.5	<79	0.4	19.0	0.11	4.4	11.9	6.9	7.6	107
Jun 2022	5.990	5.2	261	3.6	183	0.4	17.9	0.12	5.7	11.4	7.0	7.6	<37
May 2022	7.847	4.1	287	2.0	136	0.2	12.1	0.07	5.2	10.1	7.1	7.6	36
Apr 2022	8.788	3.6	269	2.1	157	<0.2	<11.4	0.13	9.1	14.8	7.3	7.5	<27

White River Average Daily Effluent - Minerals Report

Month	TDS mg/L	TDS Load Lbs/dy	Sulfate Total As So4 mg/L	Sulfate Total Load As So4 Lbs/day	NO3 (Nitrate) mg/L	NO3 (Nitrate) Load Lbs
Permit Limit Dec-Mar	*500*	*52,542*	*119*	*12505*	*report*	*report*
Apr 2023	323	19,575	56	3,423		
Mar 2023	308	24,645	60	3,568		
Feb 2023	368	19,585	63	3,310		
Jan 2023	314	17,522	59	3,282		
Dec 2022	375	16,383	54	2,500	4.1	191.8
Nov 2022	390	13,159	62	2,079		
Oct 2022	383	13,385	74	1,654		
Sep 2022	372	14,106	67	2,922		
Aug 2022	361	15,694	57	2,643		
Jul 2022	374	20,534	53	2,201		
Jun 2022	368	20,717	47	2,932		
May 2022	310	21,509	50	3,736		
Apr 2022	296	22,171	65	4,413		

Appendix A-1: Noland Influent Report

Month	Flow MGD	Hydraulic Loading %	CBOD Load Lbs	Orangic Loading %	TSS Loading Lbs	TSS Loading %	PO4 Loading Lbs	PO4 Loading %	NH3 Loading Lbs	NH3 Loading %
Design Annual Average	12.60		29,666		23,198		765		2,250	
Apr 2023	4.68	37.1	15,926	53.7	8,507	36.7	227	29.7	917	40.8
Mar 2023	9.08	72.1	17,506	59.0	10,561	45.5	286	37.4	1,098	48.8
Feb 2023	8.08	64.1	14,485	48.8	8,700	37.5	263	34.4	982	43.6
Jan 2023	6.17	49.0	13,140	44.3	7,756	33.4	217	28.4	760	33.8
Dec 2022	5.99	47.6	11,497	38.8	8,718	37.6	205	26.8	706	31.4
Nov 2022	5.91	46.9	13,234	44.6	9,292	40.1	210	27.4	921	41.0
Oct 2022	4.26	33.8	13,330	44.9	7,379	31.8	229	29.9	930	41.3
Sep 2022	4.34	34.4	11,794	39.8	7,807	33.7	208	27.2	810	36.0
Aug 2022	4.83	38.4	17,100	57.6	8,961	38.6	218	28.6	878	39.0
Jul 2022	3.85	30.6	11,832	39.9	7,935	34.2	185	24.2	615	27.3
Jun 2022	4.94	39.2	13,202	44.5	8,182	35.3	176	23.0	599	26.6
May 2022	8.07	64.1	12,877	43.4	8,113	35.0	246	32.2	826	36.7
Apr 2022	8.88	70.5	16,421	55.4	11,615	50.1	249	32.5	1,006	44.7

Appendix B: West Side Effluent Report

Goose Creek Average Daily Effluent Report

Month	Flow MGD	CBOD mg/L	CBOD Load Lbs	TSS mg/L	TSS Load Lbs	Total P mg/L	Total P Load Lbs	NH3 mg/L	NH3 Load Lbs	DO (min) mg/L	pH (min) SU	pH (max) SU	Fecal Coliform Geo Mean MPN/100 mL
Permit Limit Apr-May		*10.2*	*850.7*	*10*	*834*	*1.0*	*83.4*	*1.6*	*133.4*	*>7.7*	*>6.0*	*<9.0*	*1,000*
Apr 2023	8.7	<2.0	<228.1	1.0	72	<0.1	5.3	<0.1	<8.4	9.8	7.0	7.4	<5
Mar 2023	13.3	<2.0	<210.2	1.0	103	0.1	8.9	<0.0	<4.0	10.3	6.9	7.4	<6
Feb 2023	11.7	<1.9	<127.7	1.0	103	0.1	7.7	<0.1	<4.4	10.4	7.0	7.4	<7
Jan 2023	9.9	<2.0	<91.4	1.2	104	0.1	7.2	<0.0	<2.2	7.6	7.1	7.3	<9
Dec 2022	9.5	<2.0	<144.6	1.0	79	<0.1	9.2	<0.1	<3.4	8.5	7.0	7.5	<12
Nov 2022	8.0	<1.9	<138.0	1.0	64	<0.1	4.1	<0.0	<1.6	9.3	7.2	7.6	<8
Oct 2022	6.6	<1.8	<101.1	1.0	57	0.1	4.6	<0.3	<25.2	9.0	7.2	7.6	<11
Sep 2022	6.8	<2.5	<123.5	1.0	55	<0.1	3.3	<0.1	<4.3	8.6	7.3	7.7	<6
Aug 2022	7.3	<2.3	<154.1	1.0	62	<0.1	4.5	<0.0	<4.3	8.5	7.3	7.7	<6
Jul 2022	5.8	<2.0	<173.0	1.0	47	0.1	6.0	<0.1	<6.5	7.9	7.3	7.8	<5
Jun 2022	7.7	<2.0	<177.9	1.0	65	0.1	4.7	<0.1	<7.1	8.7	7.2	7.7	<6
May 2022	12.6	<2.0	<199.2	1.0	109	<0.1	14.9	0.1	9.8	9.1	7.0	7.5	<6
Apr 2022	12.8	<2.0	<144.5	1.0	112	<0.1	7.7	0.0	3.7	9.7	7.0	7.4	<6

Appendix B-1: West Side Influent Report

Month	Flow MGD	Hydraulic Loading %	BOD Load Lbs	Orangic Loading %	TSS Load Lbs	TSS Loading %	Total P Load Lbs	PO4 Loading %	NH3 Load Lbs	NH3 Loading %
Design Annual Average	10.0		14,595		14,595		584		1,918	
Apr 2023	8.7	87.5	10,393	71.2	11,139	76.3	249	42.6	1,374	71.7
Mar 2023	13.3	133.2	10,374	71.1	14,426	98.8	276	47.3	1,341	69.9
Feb 2023	11.7	117.4	11,289	77.3	11,517	78.9	247	42.3	1,239	64.6
Jan 2023	9.9	99.3	11,398	78.1	10,453	71.6	251	43.0	1,281	66.8
Dec 2022	9.5	95.3	11,463	78.5	12,504	85.7	277	47.4	1,199	62.5
Nov 2022	8.0	80.4	11,688	80.1	11,915	81.6	260	44.5	1,256	65.5
Oct 2022	6.6	66.3	11,918	81.7	10,762	73.7	256	43.8	1,327	69.2
Sep 2022	6.8	67.8	10,419	71.4	11,859	81.3	258	44.1	1,256	65.5
Aug 2022	7.3	72.7	10,496	71.9	12,539	85.9	239	41.0	1,299	67.7
Jul 2022	5.8	58.1	10,797	74.0	14,063	96.4	272	46.6	1,396	72.8
Jun 2022	7.7	77.3	10,377	71.1	11,381	78.0	239	40.8	1,337	69.7
May 2022	12.6	125.5	10,734	73.5	10,772	73.8	271	46.3	1,291	67.3
Apr 2022	12.8	128.1	12,021	82.4	14,644	100.3	252	43.2	1,312	68.4

Appendix C. Employee Vacancy and Project Status Report

Department	Job Title	Employee Name	Fayetteville % FTE
Admin	Project Manager	Jan Guy	82.00%
Admin	Assistant Project Manager	Mayo MIller	100.00%
Admin	Health, Safety, Compliance Professional	Wes Cloud	70.00%
Admin	Project Coordinator	Brandi Miller-DeWeese	90.00%
Admin	Administrative Assistant	Christy Taylor	100.00%
Admin	Administrative Assistant	Kassandra Foster	100.00%
Admin	Project Specialist	Sarah Garrison	100.00%
BMS	BMS Supervisor	Peter Burrow	100.00%
BMS	Lead Operator	John Tenberge	100.00%
BMS	Operator I	David Dajani	100.00%
BMS	Equipment Operator	Charlie Boger	100.00%
BMS	Equipment Operator	Anthony DeJesus	100.00%
BMS	Equipment Operator	Vacant	100.00%
BMS	Operator In Training	Christopher Cox	100.00%
BMS	Operator In Training	Ben Shondelmyer	100.00%
BMS	Operator In Training	Robert Donnell	100.00%
BMS	Operator In Training	Chris Robinson	100.00%
BMS	Mechanic	Mike Reed	100.00%
Admin	Process & Compliance Supervisor	Thom Vinson	90.00%
Admin	Environmental Specialist	Jeff Hickle	100.00%
LAB	Laboratory Director	Donna McChristian	90.00%
LAB	Industrial Pretreatment Coordinator	John Byrd	100.00%
LAB	Lead Laboratory Analyst	Matt Benton	100.00%
LAB	Laboratory Analyst	Walter Chodor	100.00%
Maint	Maintenance Supervisor	Joshua Alleman	100.00%
Maint	Lead Mechanic	Brian Daniels	95.00%
Maint	Lead Electrician	Tim Marr	70.00%
Maint	Mechanic	Robert Ingram	100.00%
Maint	Mechanic	Buddy Carter	100.00%
Maint	Mechanic	Tom Cotter	100.00%
Maint	Mechanic	Paul Goolsby	100.00%
Maint	Mechanic	Rick Dollarhide	100.00%
Maint	Mechanic	Michael Spohn	100.00%
Maint	Mechanic in Training	David Post	100.00%
Maint	Mechanic in Training	Caleb Wheeler	100.00%
Maint	Utility Worker - Temp	Broc Burus	100.00%
Maint	Utility Worker - Temp	Ezra Maglothin	100.00%
Operations	Operations Supervisor	Shawn Santellanes	100.00%
Operations	Lead Operator	Travis Patton	100.00%
Operations	Operator I	Anthony Ramsfield	100.00%
Operations	Operator I	Justin Sweeney	100.00%
Operations	Operator	Tom Meunier	100.00%
Operations	Operator	Chandler Smothers	100.00%
Operations	Operator	Brittney Doyle	100.00%
Operations	Operator In Training	Jeremy Johnson	100.00%
Operations	Operator In Training	Michael Stout	100.00%
Operations	Operator In Training	Patrick Cypret	100.00%
SCADA	Instruct and Control Tech	Vacant	100.00%
SCADA	Instrument & Control Tech	Pat Cooley	95.00%
SCADA	Instrument & Control Tech	Preston Jones	100.00%
SCADA	Information & Operational Tech	James Mason	50.00%

Authorized Positions =	**51.0**
Filled Positions =	**49.0**
Filled FTE's=	**47.3**

REGIONAL SUPPORT and SPECIAL PROJECTS (Performed in scope)

Area	Reason	Name	Hours
SCADA	Network Upgrade	Scada Regional Support	5.5
Maintenance	Maintenance, Reporting, and IT Related Activities	Various Regional Staff	126.5
BMS	Dryer Installation Project	Staff & Regional Support	996.0
Noland	Master Plan Data Request and Sampling Planning	Staff	0.0